

## Project Title

Based on the IBM SPSS Statistics Project 2, analyse:

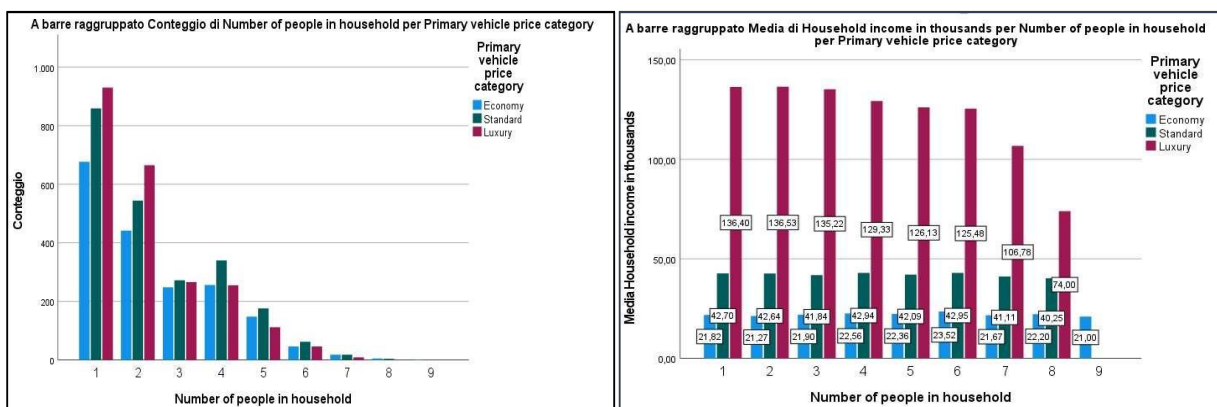
- 1) the relationship between the 'Number of people in household' (reside) and the 'Primary vehicle price category' (carcat).
- 2) Next analyse the relationship between the 'Household income in thousands' (income) and the 'Primary vehicle price category' (carcat), then compare the results.

Compare the 'Number of people in household' and the 'Household income in thousands' based on the same 'Primary vehicle price category' reference data.

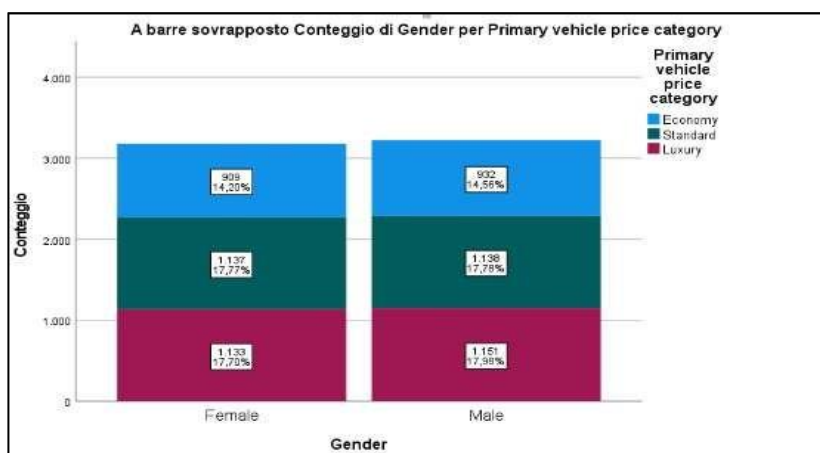
Provide an answer to the following question. In reference to the Primary vehicle price category, is there correlation between the Number of people and Household income?

## Question # 1 analysis

The comparison between reside and the carcat shows that this last variable increases when the number of people in household decreases: the share of "Luxury cars" is much higher in family with a lower number of components.

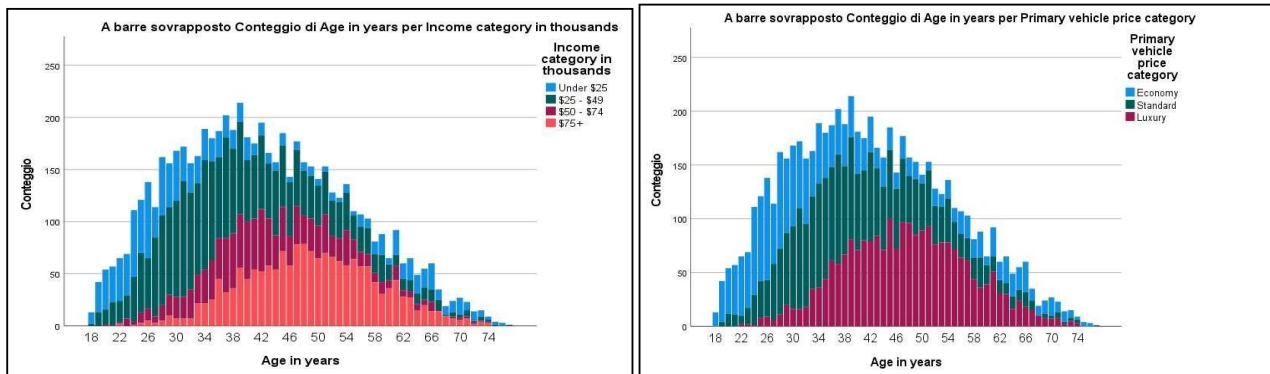


On the other hand, the average of "Standard" and "Economy" cars seems to consistently increase when the number of people in household growth.

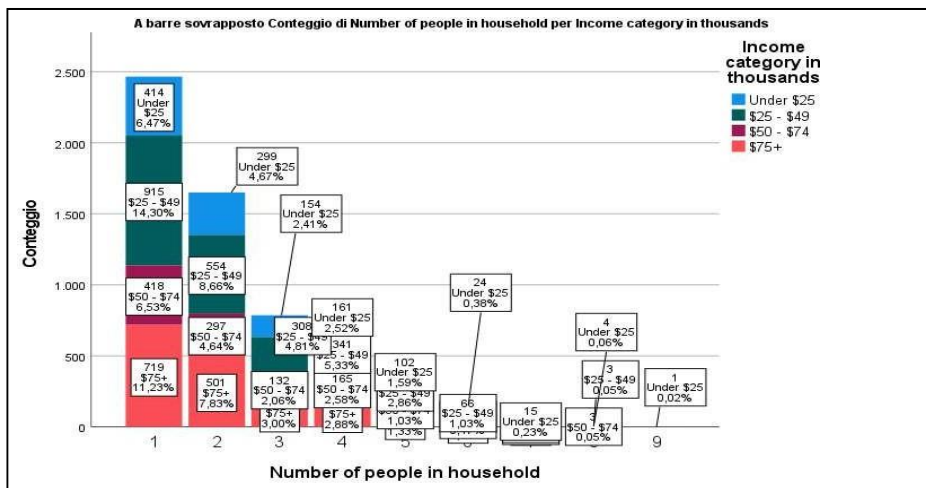
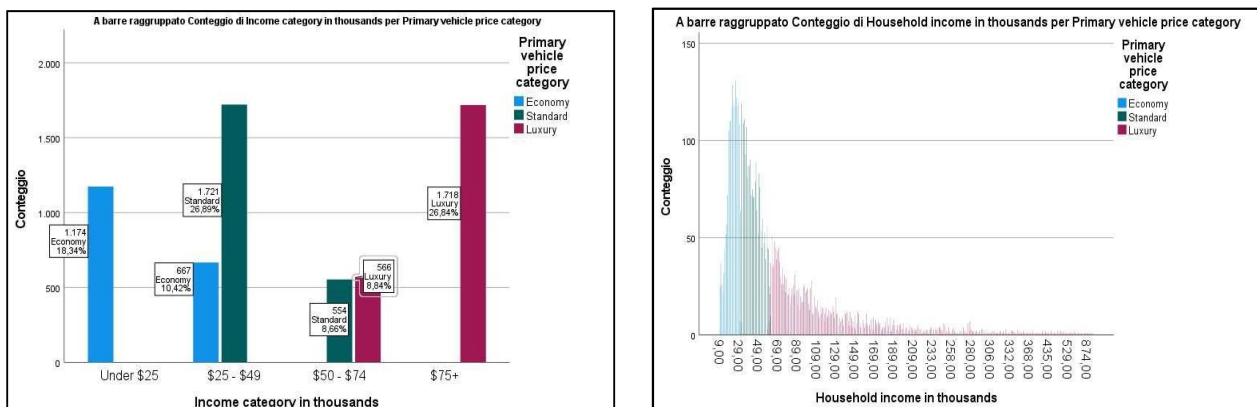


The analysis of the relationships between the average "Primary vehicle price category" and gender of owners doesn't offer additional relevant information.

Additionally, the cross-comparison between “Age”, “Average income” and “Primary vehicle category” offers interesting correlations, and it looks clear that people aged 35 to 55 are the most numerous owner of Luxury cars.



By comparing the “Household income in thousands” to the “Primary vehicle price category”, it turns out that higher the income, higher the cars’ price category.



Moreover, in analysing data it turns out that when the number of people in household increases (in X axis), the number of people included in clusters with higher income available decreases accordingly.

## Question # 2 analysis

By comparing data and relationships pointed out before, the correlation between the number of people in household and Household income looks very strict: the household with lower number of components own the highest share of luxury cars (the average income is higher in family with a lower number of components), while in households with higher number of components the share of luxury cars decrease sharply.